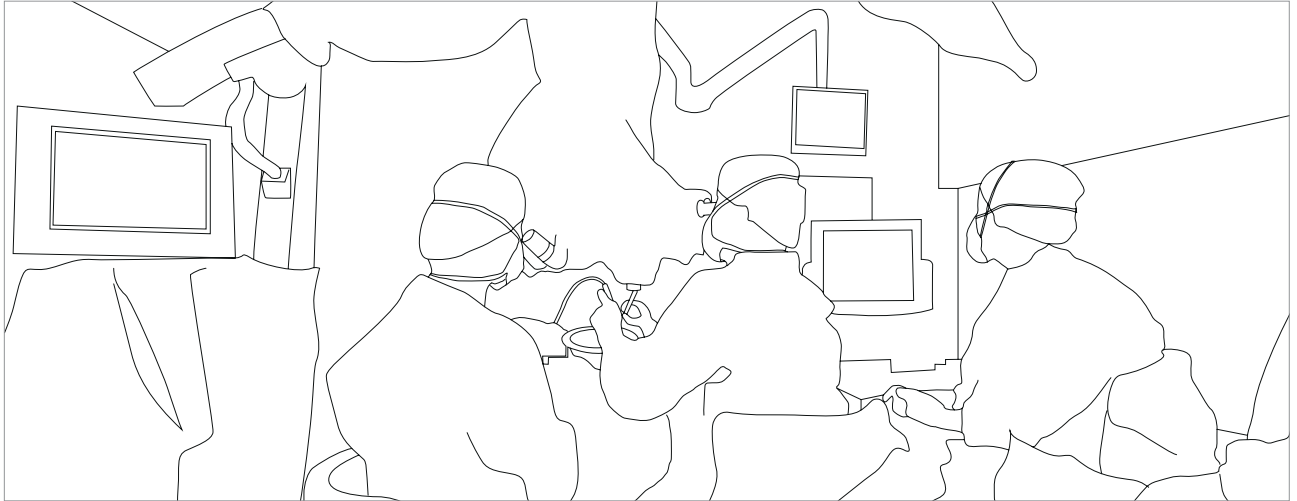


First Announcement | Save the Date

Berlin, 28.06.2016



## imagNe surgery | 28 - 29 April 2017

Charité University Hospital, Berlin

Present-day surgical settings are changing in that they do increasingly involve a profound visual and technical expertise in preparing and performing surgical interventions. In various fields, from endoscopic procedures to interventional angiography, navigated tumor resection and image-guided ablation or radiation, operating room environments incorporate a large variety of mobile and fixed devices and systems, thereby anticipating a future of surgery that will be largely shaped by computer-assisted technology.

Consequently, the surgical performance already relates to a multitude of different collaborating specialities and professions. In operating rooms, research and development labs, companies, and academic institutions, cross-disciplinary teams are searching for new means of adequate surgical support. They aim at early clinical evaluation of new technology and translational research designs while addressing practical implications of visual, haptic, robotic, and cognitive dimensions of technology-assisted surgery.

Centering this particular emerging trend in both research and practice, the workshop will bring together surgeons and technical staff, international research labs affiliated to hospitals, independent designers and engineers, and industry representatives, to discuss on-site strategies and pitfalls of practice-based technology development and implementation.

Topics include but are not restricted to:

- Context-sensitive identification and communication of surgical needs
- Consideration of practical surgical requirements and established routines for development of new technologies or expanding application areas of existing technology

- Correlation with treatment quality and patient outcome
- Potential and limitations of existing architectural and technical OR infrastructure
- Range of expertises that are considered indispensable for successful communication and development, and multidisciplinary team building
- Economical challenges and cost-effectiveness especially in early adopting clinical sites
- Testing new prototypes within existing clinical workflows and environments
- Identification and prevention strategies in potential failure of promising solutions during continued implementation
- Establishing inter-lab connections in order to exchange and share professional experience and expertise
- Involving alternative communities (including open source development and hackathons) in clinical research and practice
- Project-based collaborations with industrial leaders, transferring research findings into general usability improvements of commercially available products
- Consequences for doctor-patient communication of treatment options and benefits

This workshop is the first of two planned events, with a follow-up at Brigham and Women's Hospital in Boston, Massachusetts, in 2018. More information to follow.

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